Fig. 1

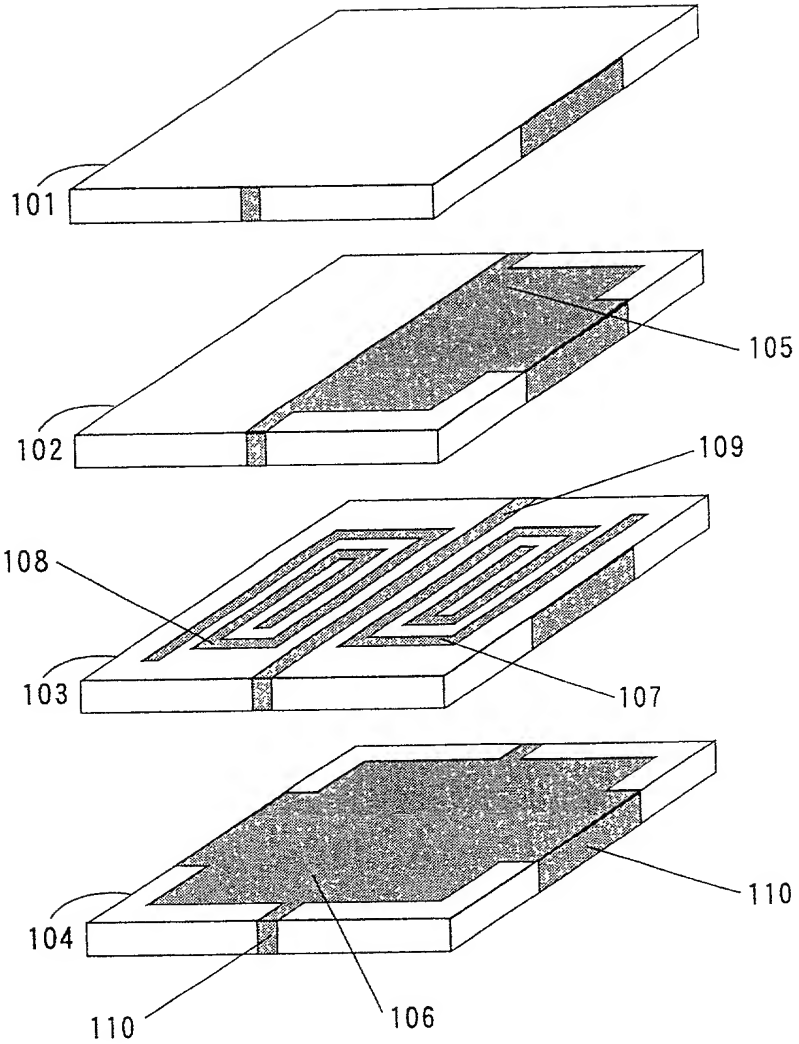


Fig. 2

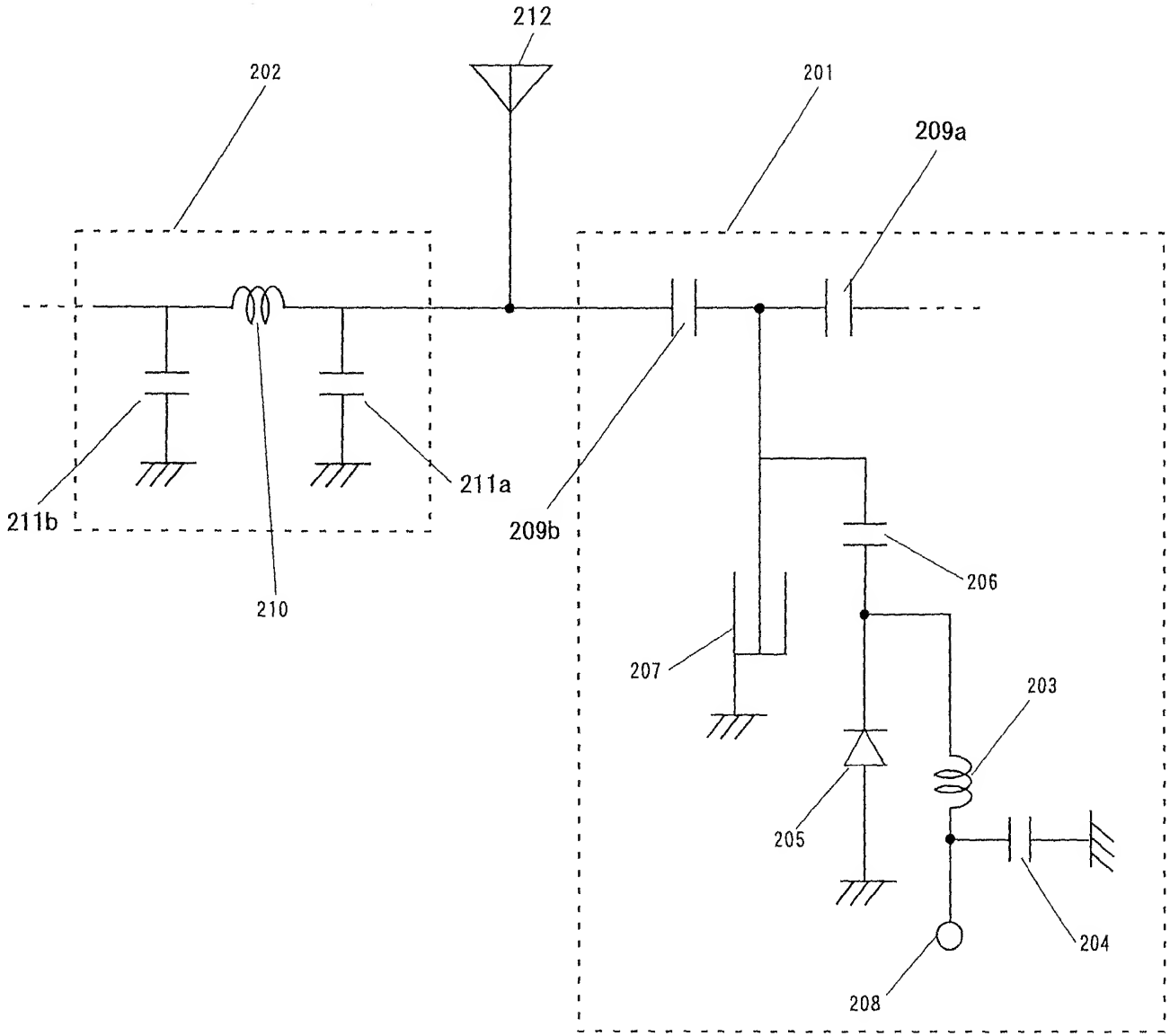
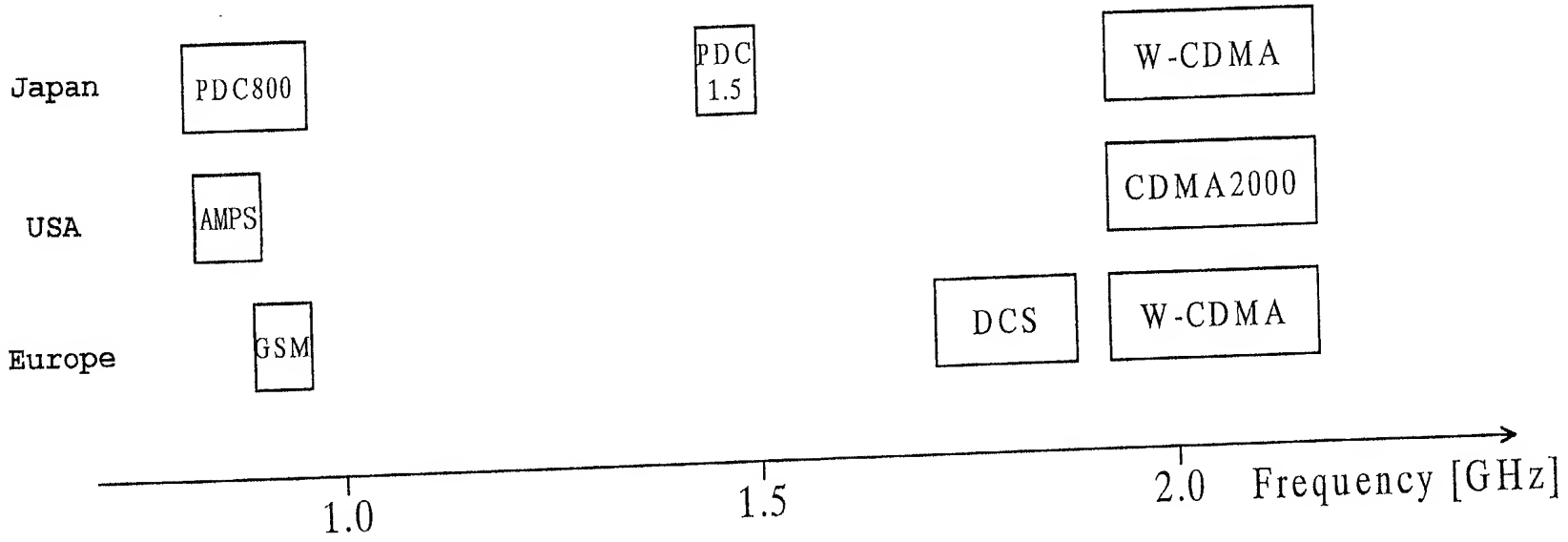


Fig. 3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PDC 1.5
W-CDMA
USA
AMPS
CDMA2000
DCS
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Europe
GSM
1.0
1.5
2.0
Frequency [GHz]

Fig. 4

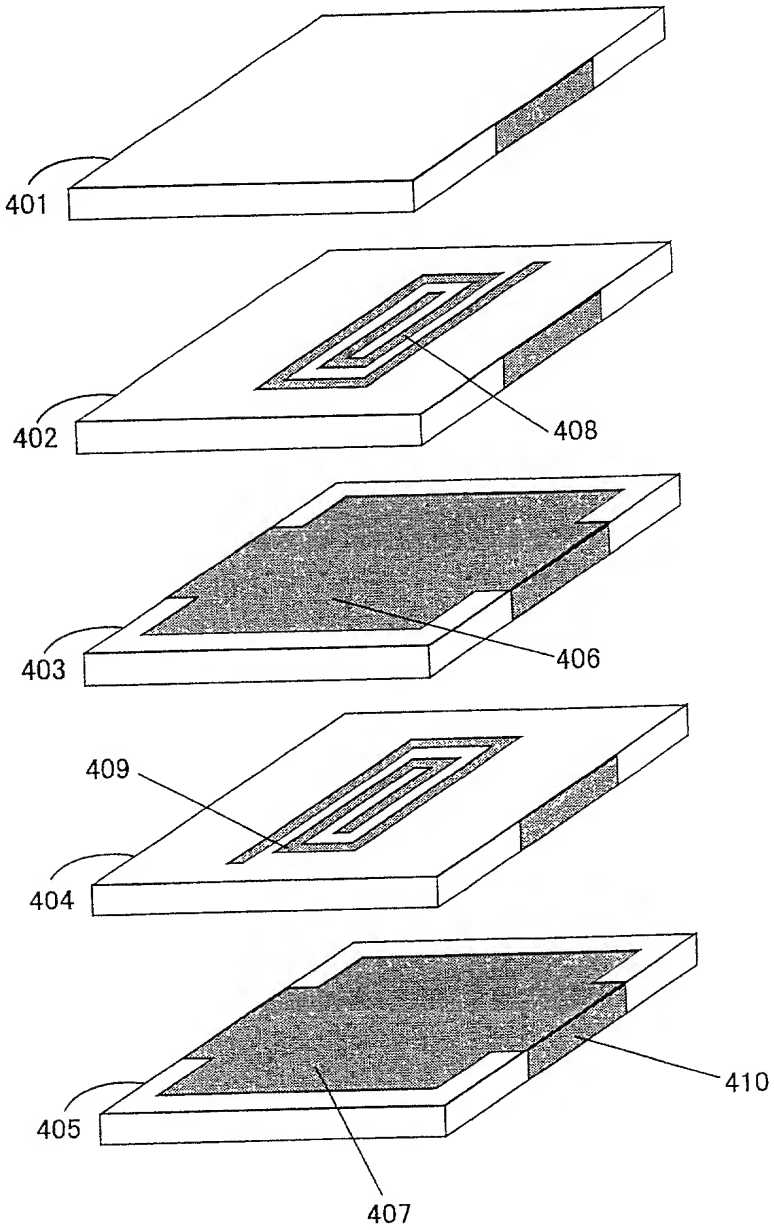

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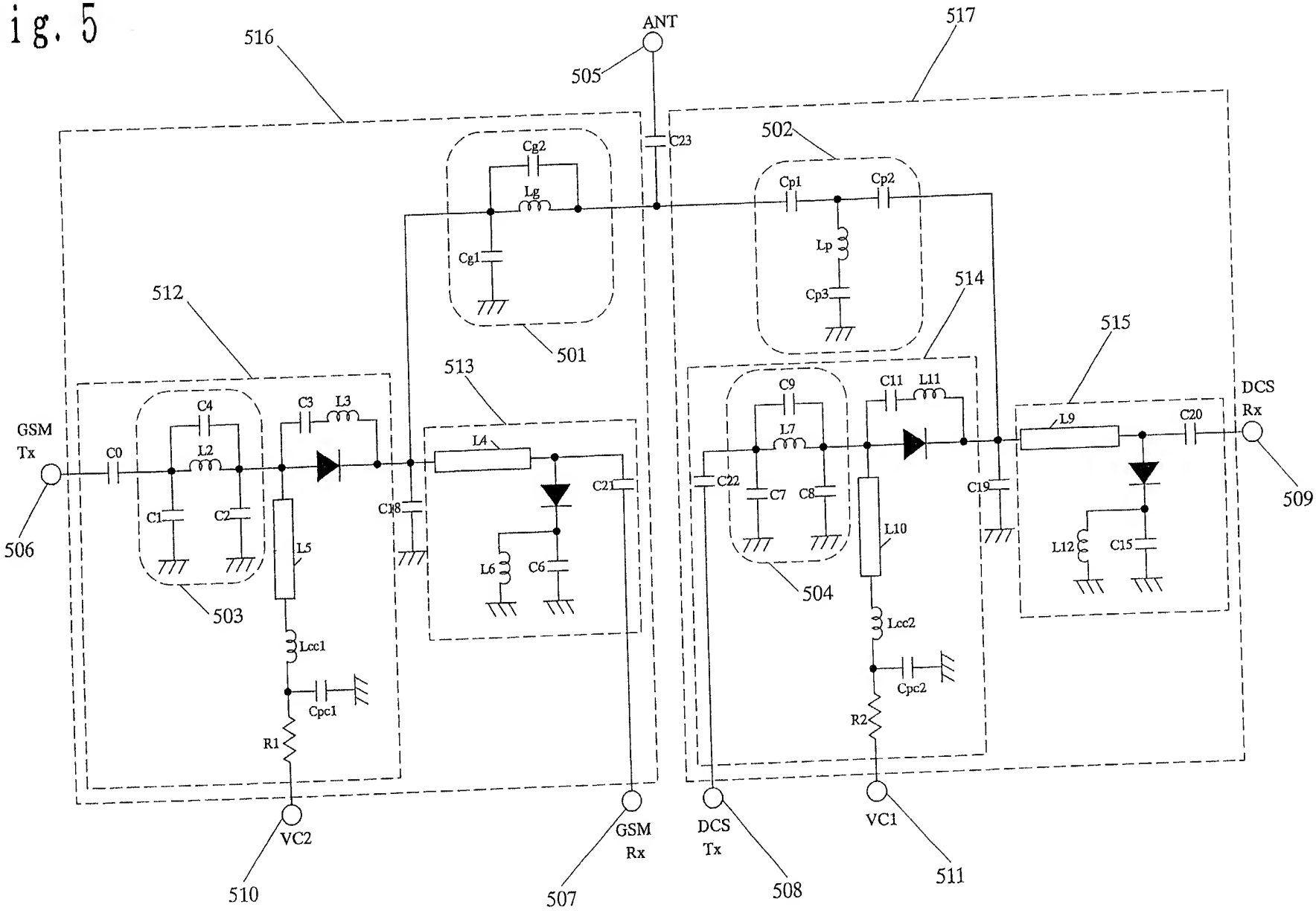
Fig. 5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Lg
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Cp3
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515
GSM
Tx
506
C0
C4
L2
C1
C2
503
C3
L3
L5
C18
L4
C21
L6
C6
C9
L7
C22
C7
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C11
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C19
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DCS
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509
L12
C15
Lcc1
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R2
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Tx
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VC1
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Fig. 6

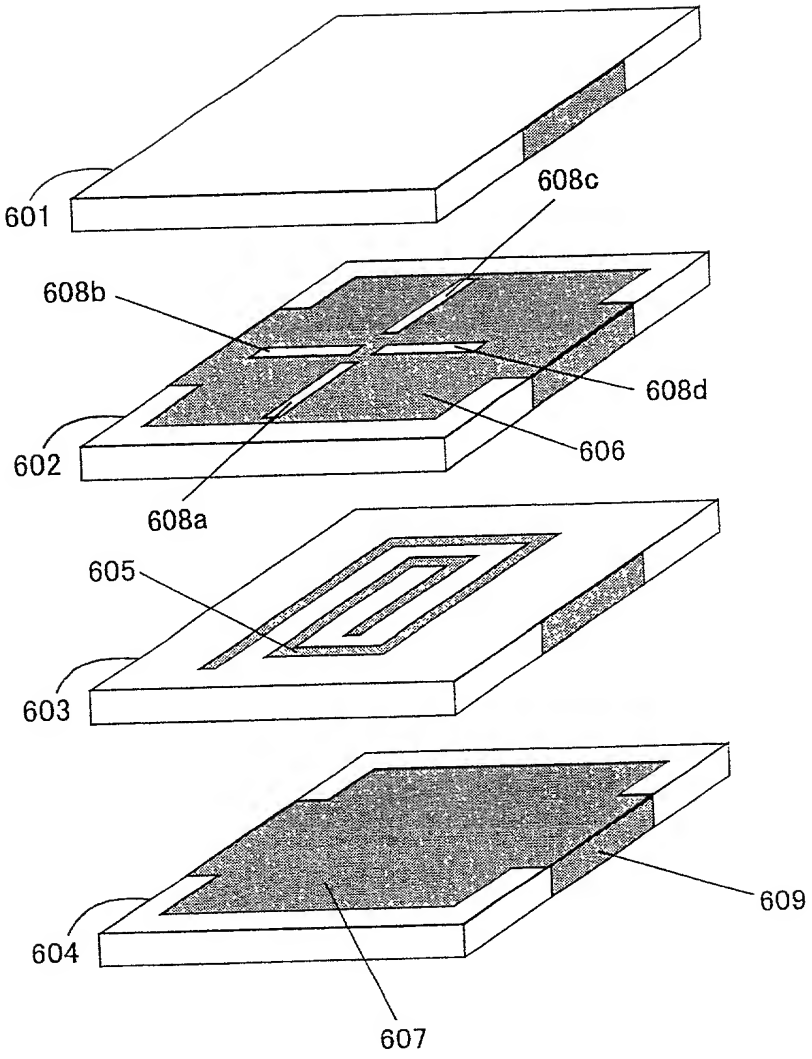

Fig. 7

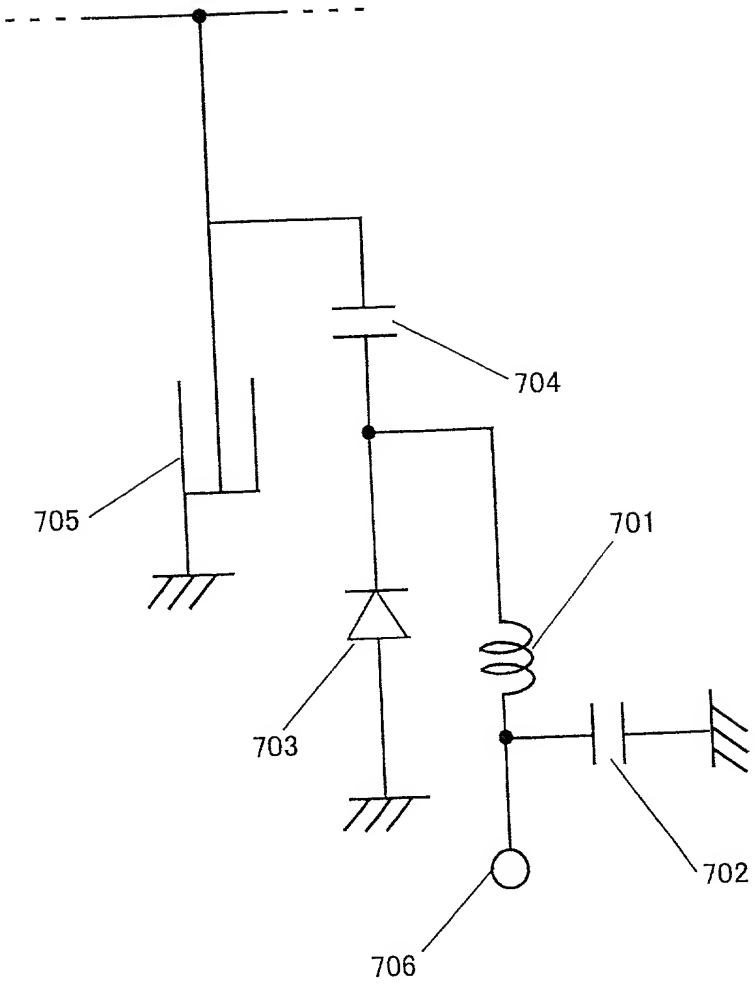

Fig. 8 (a)

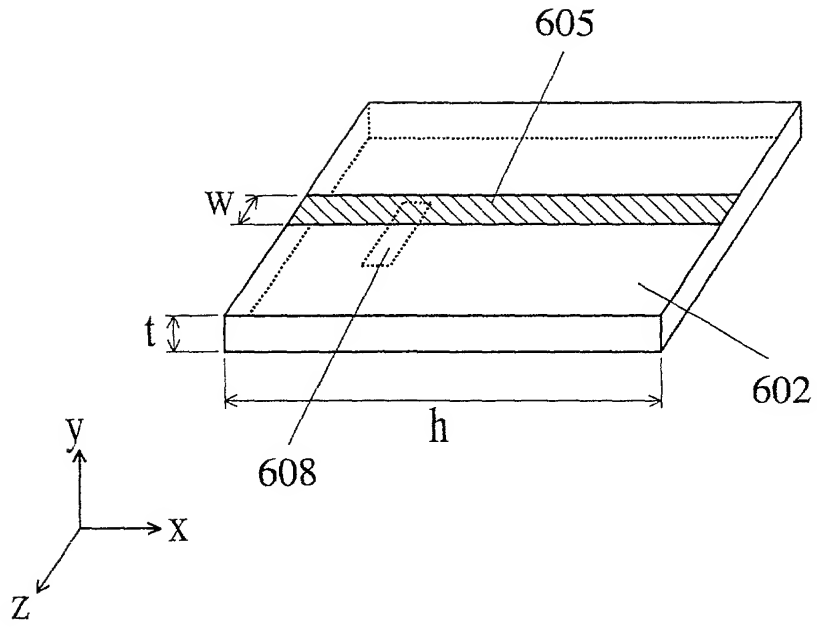

Fig. 8 (b)

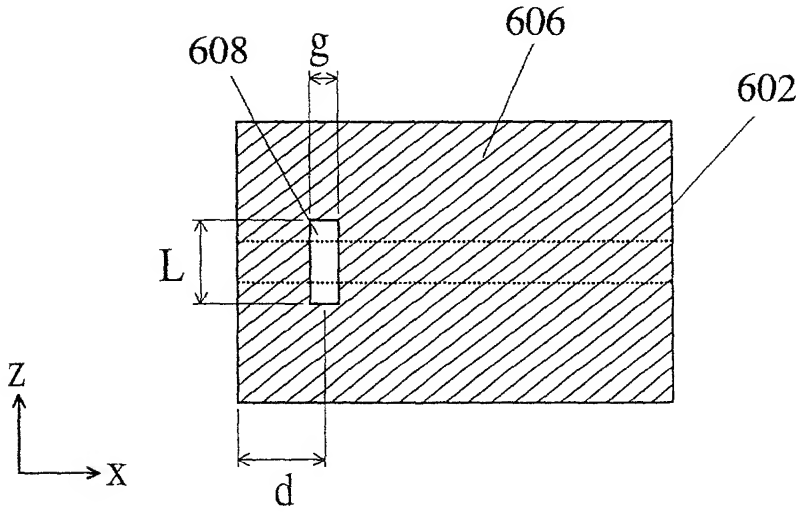

Fig. 9

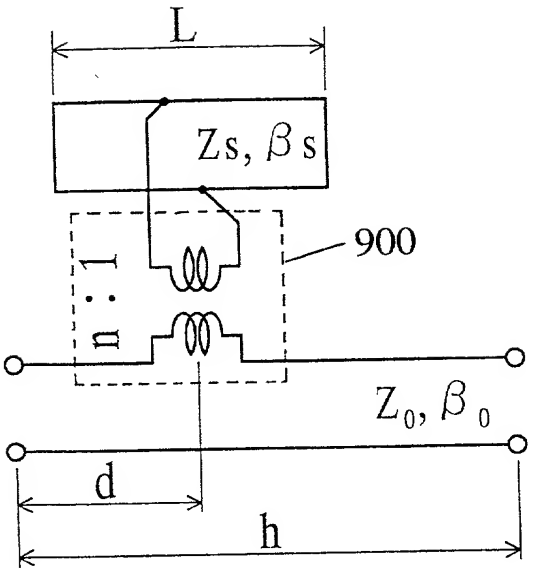

Fig. 10

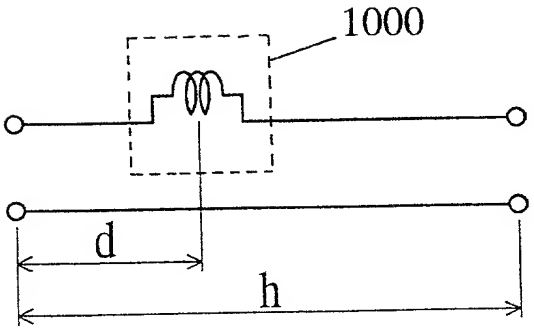

Fig. 11

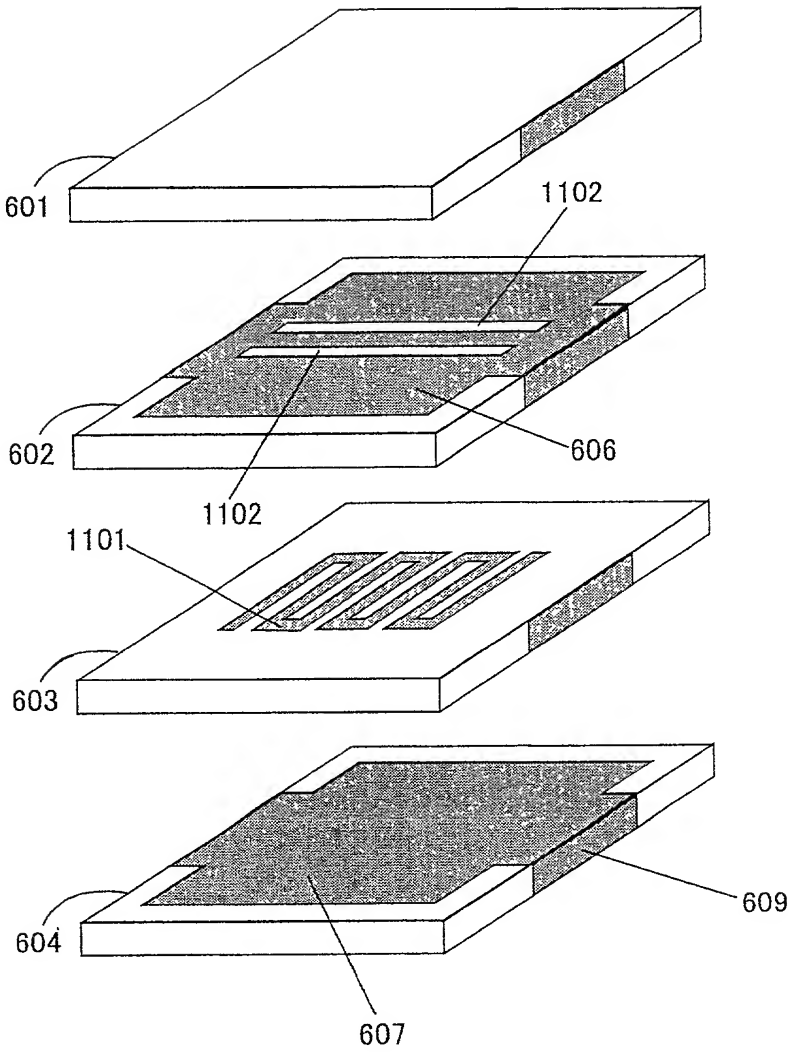

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Fig. 12

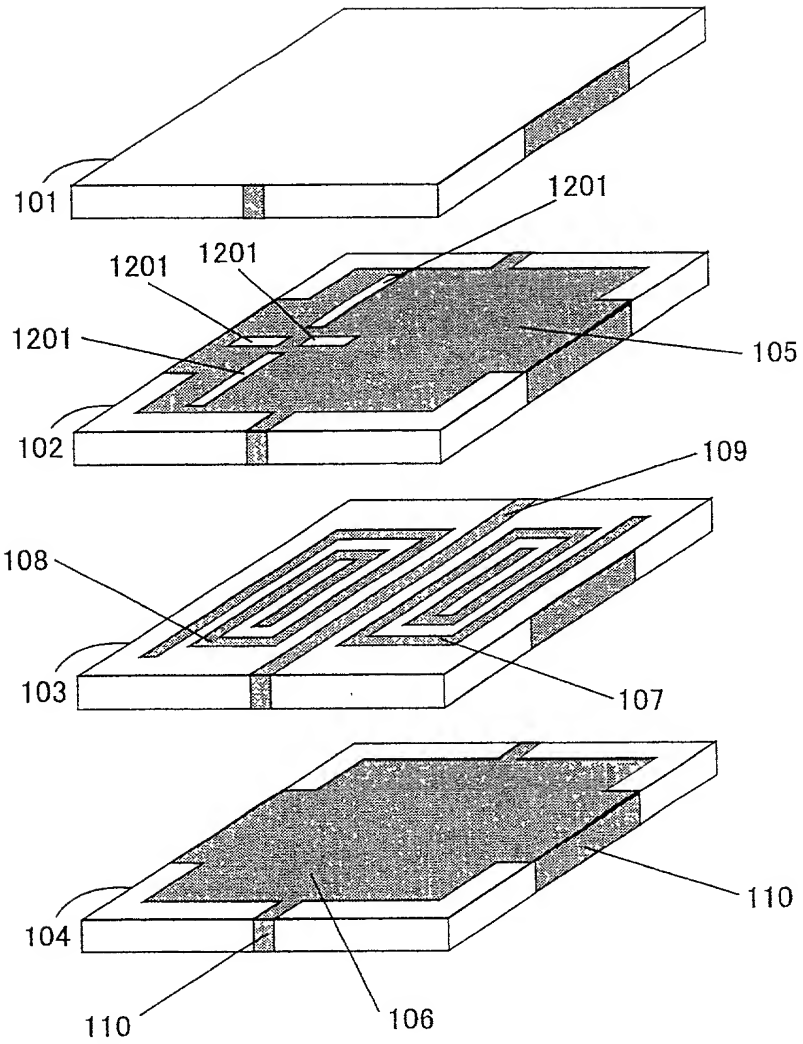

Fig. 13

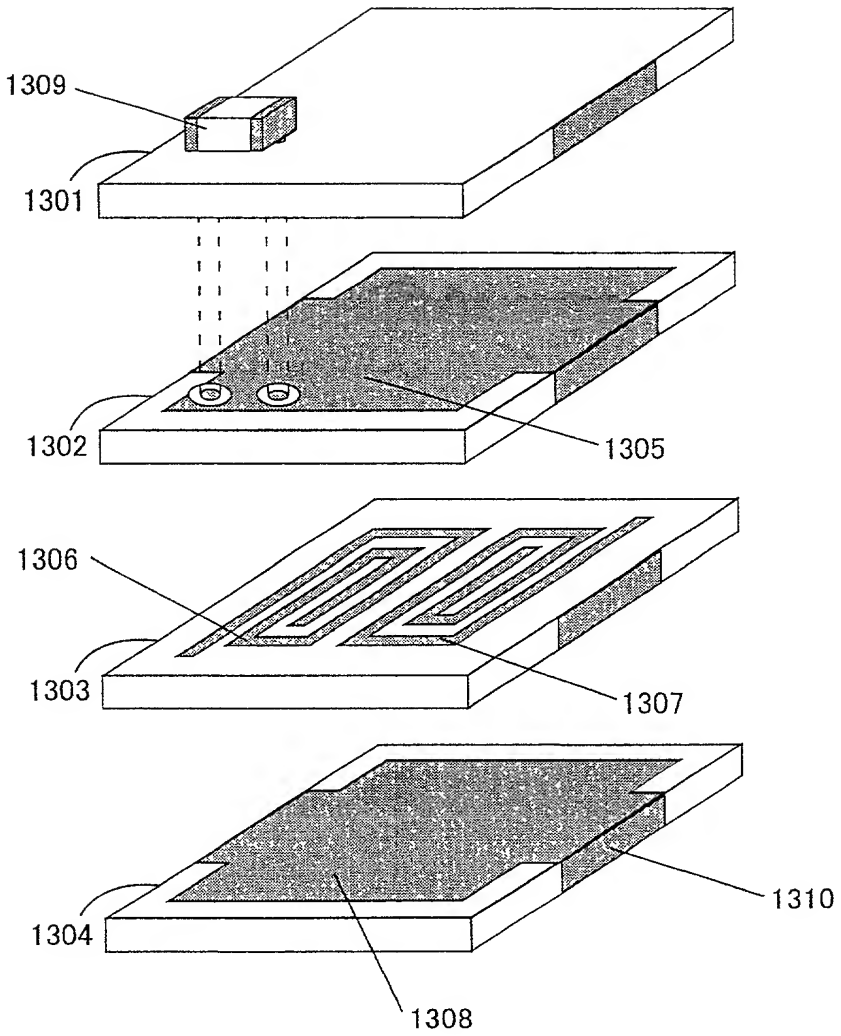

Fig. 14 (a)

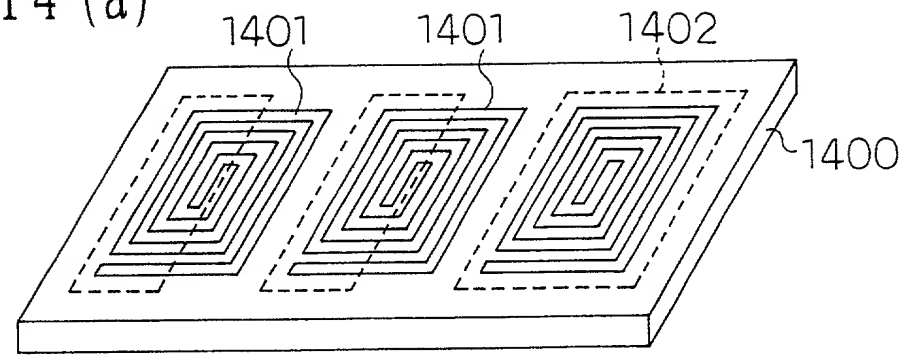

Fig. 14 (b)

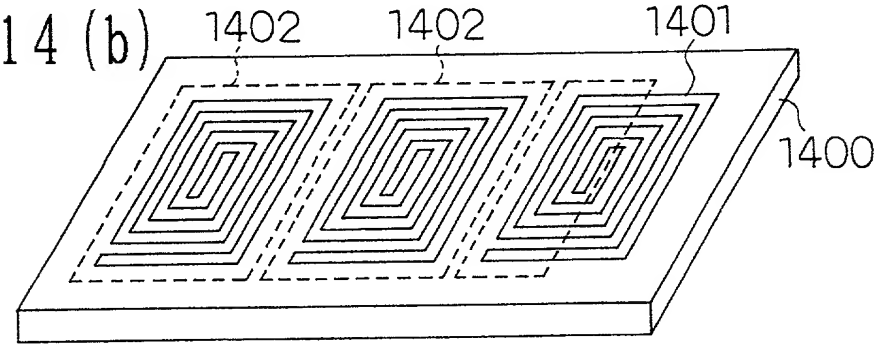

Fig. 14 (c)

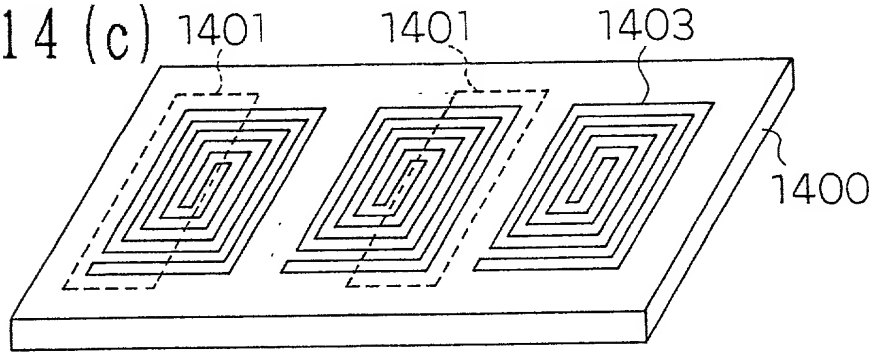

Fig. 14 (d)

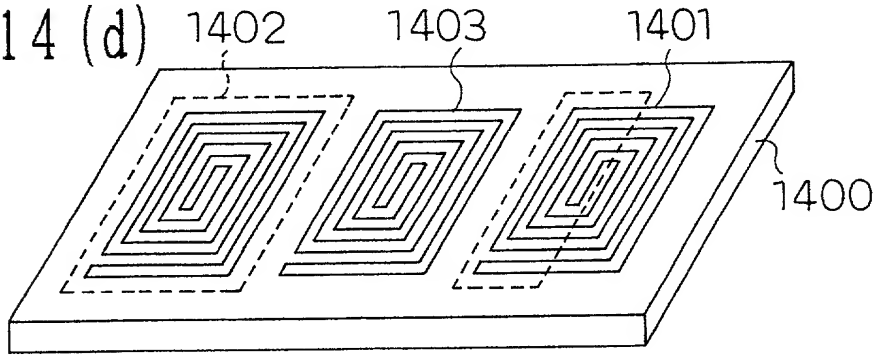

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Fig. 15

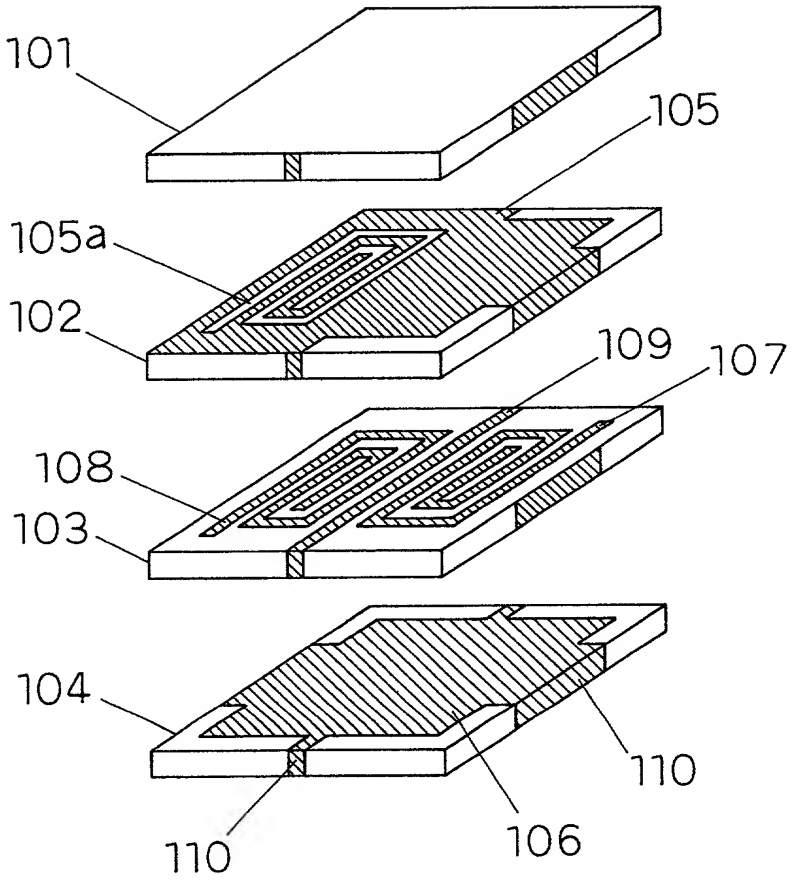
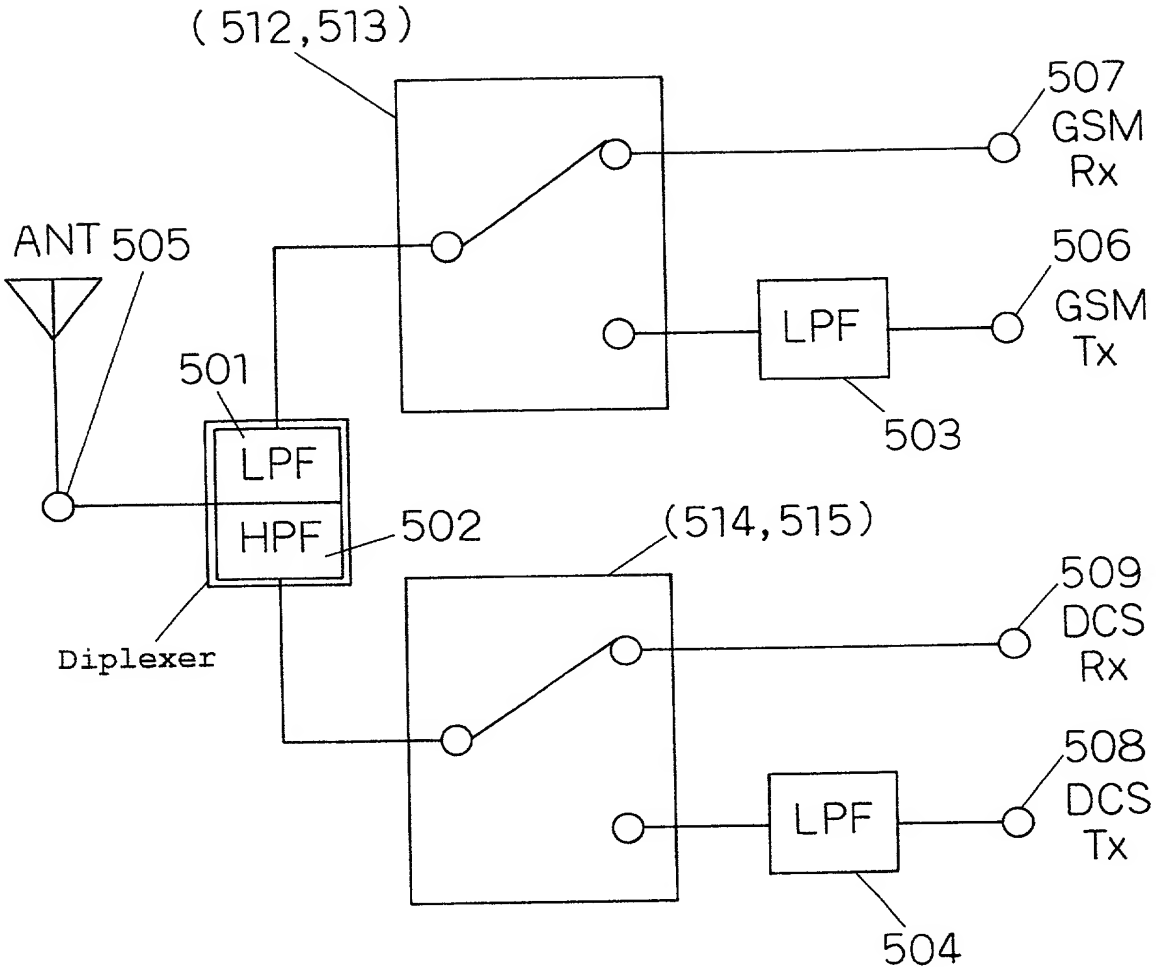


Fig. 16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Tx
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Diplexer
508
DCS
Tx
LPF
504

Fig. 17

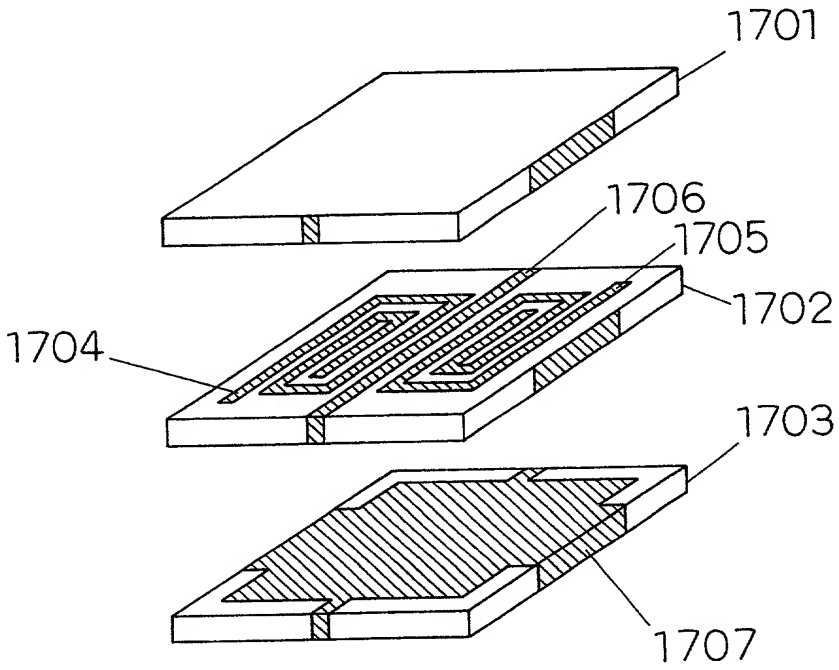

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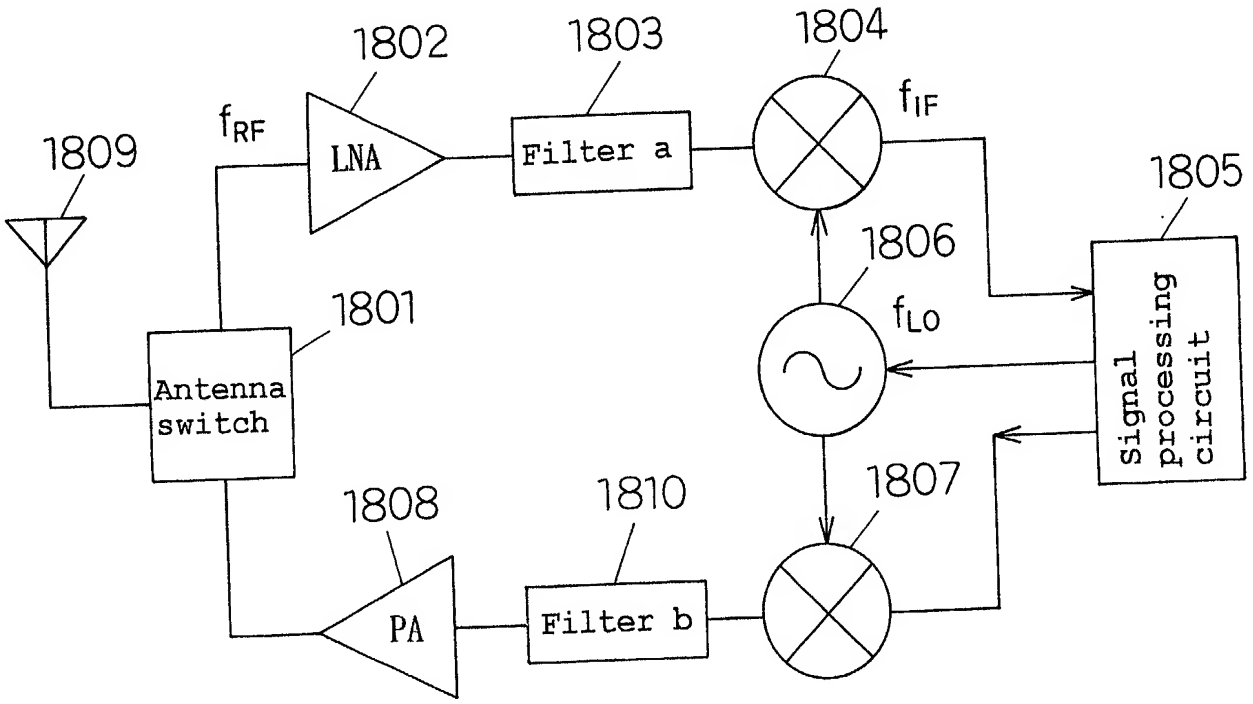
Fig. 18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1804
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f_{IF}
1805
1806
1801
f_{LO}
Antenna switch
signal processing circuit
1808
1810
1807
PA
Filter b